The tent is occupied by only one household, and each of the married couple has his own side. The man's side is to the left as one enters the door; there he keeps his mehari saddle, his weapons, and his bags of salt. To the right is the woman's place, where she keeps her bag of personal things, her saddle if she has one, the bags containing the food supplies, and the kitchen implements which she has charge of.

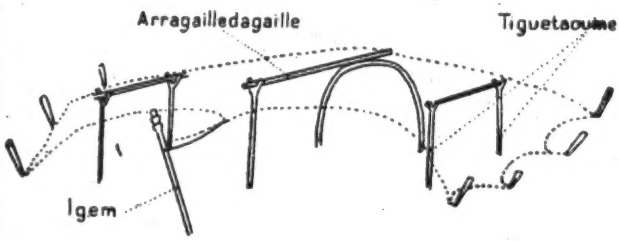


Fig. 26. Tent used by the Agouh-n-Tehlé. Sometimes the stake supporting the aragailledagaille may be replaced by a second arch. In some tribes, particularly among the Kel Ahnet, the arches were placed crosswise.

In summer when it is very hot, the Tuareg sometimes use straw huts, as much to save hides as to be a bit more comfortable. The leather tent, in fact, is made almost useless by the heat, and nomads often seek shelter during the heat of the day under neighboring trees when there are any or else in the rocks.

Captives never have tents. They build themselves little shelters with a few branches on which are hung scraps of leather or cloth.

It falls entirely to the women to put up the tents.

Granaries. -- One of the most characteristic facts of nomadic life is its lack of foresight in questions of food. For the most part, the nomad lives from one day to the next, following the seasons, without accumulating anything. This is somewhat the case for the Tuareg. Still, the Sahara is not a country where one can find supplies easily.

251 Thus, they are forced to keep supplies on hand, /226/ but it is a
343 limited stock, consisting of two or three bags of sorghum or dates which are transported each time the camp is moved. It is customary, when supplies are more considerable, to leave them in the rocks of the mountains in spots known to the people of the tribe. These granaries (ekaham) allow them to travel lighter and at the same time put supplies in safe places. In case camps are raided they make a sufficient food reserve so that the people are not driven to starvation.

184 Some tribes which have gardens in the centers of cultivation often have food deposits there; they are stored for a whole family
343 group. Thus the Dag Rali have stores in the Koudia, at Ilaman,
423 Tarahananet, Abalessa, etc., where they entrust the care of their
251 goods to their local representatives. These centers have secret granaries; they are scarcely used these days, but they were used before the French occupation for reasons of safety in case of raids. We have seen hiding places of this kind at Tit and at Bloumet, and there are probably some at Tazerouk and Ideles. They consist of cellars dug in the soil at ground level and hidden from the eyes of passers-by. Merchandise was thus protected from men and rodents.

171 While we are on the subject, let us add that granaries dug in rock are common among all Berbers. Today they may still be seen in Morocco and among the Chaouia /Shawia/ of Aurès. This custom seems to have been common in Mediterranean countries, in Syria, and especially in Palestine where it was already reported in Biblical times.

343 The Akhamouk amenokal was the only person who had real
643 granaries. He had three or four of them constructed of stone bound
251 with clay using the Sudanese technique. They were placed at the top of a rocky crest on the left bank of the Abalessa wadi, near the place where his camp was most often established.

513 Sleeping arrangements. -- Bedding includes only one or two
[566] sheepskins sewn together, or more rarely a rug among the rich people.

234 to extract all the water, and then dry them on /235/ small screens placed in the branches of trees. It goes without saying that cheese making is very rare in the Ahaggar and that the Tuareg make it [438] particularly when they are nomadizing in the Sudan. Every year the Ihaggaren bring back large supplies of cheese from their stay in the Sudanese zone; these cheeses, dry as a bone, are either made by the Ihaggaren or bought from the southern tribes. They make 252 an important contribution to the Tuareg diet. These dry cheeses 262 are ground in a mortar and reduced to small fragments so that they have the consistency of flour. Then they are mixed with food, either in béchena gruel or in a drink of béchena flour and dates.

262 It might be supposed that meat plays a very large role in the Tuareg diet. But let us recall one of our old French proverbs which says that the shoemaker is always the worst shod. We could apply this adage to herders, who perhaps eat less meat than anyone else. A herder has animals for the use of their products, but he very seldom eats them, for each butchering is a loss of capital. Indeed, the Tuareg kill their animals only under very unusual [233] circumstances, especially at the time of religious and family festivals. These killings recall somewhat the religious meaning of sacrifices. This does not mean that they do not like meat, for when they raid a rival camp, they hasten to make drastic inroads on the smaller livestock and eat until they are about to burst.

224 Hunting furnishes them a little additional meat. Each year 262 they kill a certain number of gazelles and wild sheep, eating part [251] of the meat fresh and drying the rest to keep it on hand.

They capture star lizards (Uromastix acanthinurus), jerboas, 222 gondi (Ctenodactylus sp.), sometimes even jackals and hares. We 262 can add to their meat diet grasshoppers (Shistocerca gregaria), [224] which they grill in the embers and then dry in order to pulverize [252] them. All Saharian nomads are very fond of grasshoppers, and since remotest antiquity some North African tribes are supposed to

224 [411 648] The administration fortunately has decided to confiscate these weapons.

It is very difficult to get an exact idea of the number of animals killed annually by hunters. But we believe we are close to accurate in giving the figure 300. Thus we say that hunting holds a very small place in Ahaggar Tuareg economy.

226 [184] Fishing. -- Fishing is not done by the Tuareg for the reasons we have given. Only the Issekkemâren and the Iklan engage in it. They fish when the pond water is very low. In the Tassili they dig little ditches on the lower side at water level, leading to little reservoirs where the fish find refuge and are then surely caught.

[251] When fishing has been fruitful, the Issekkemâren dry the fish to keep them for periods of scarcity.

/244/

Chapter 5

Agriculture

241 The Ahaggar Tuareg have never attached more than a very secondary importance to agriculture. Their nomadic turn of mind is at the opposite pole from land ownership and still more from exploiting it, which implies sedentary life. There are, however, a number of centers of cultivation in their country; they are of undeniable interest and could be extended more widely if improper legislation did not hinder their development.

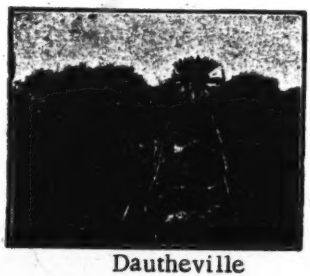
177 241 The creation of most of these centers of cultivation does not go back more than a century. It was accomplished under the influence of Arab groups settled in the Ahaggar. Only the Silet and Tibeghîn oases are much older and probably date from the time of the Imanan sultans who had brought into the Ahaggar some

usually satisfied with milk, "akh, " fresh ("akh oua kefaïen" ⵅⴼⴰⵢⵏ) or sour ("akh iezza", ⵅ ⵢⵣⵣⴰ), at the hour when the camels, sheep, or goats come in from pasture. 264

The basic food of the Ahaggar Tuareg consists of bechna, "inelli" (white-grain sorghum, Graminaceae), dates, "teïni, " and milk, "akh." ⵜⵉⵏⵜ 262

But their country provides them with many resources which they are careful not to neglect, especially the poor, the "tileqqiouin" ⵜⵉⵍⴽⴽⵉⵡⵉⵏ , who constitute the majority. 22 556

All the "imr'ad" go to harvest the grains of "toulloult" and "afezzou." Women, children, youths, negroes and negresses go into the wadis to gather the harvest, which takes place from May to June for "toulloult" and from July to the end of September for "afezzou." /29/ 243 221



[000]

Dautheville

Idelès (Koudia)

Usually, before the harvest several wadis are forbidden territory, and camels are not led there until the harvest is finished.

The produce is gathered and put into hide sacks. After the grains have dried, they need only to be put onto small trays of "afezzou, " called "tissiin, " which are shaken, and the hulls fall off and remain on top. The grains are ground to powder, and a kind of gruel is made with water or butter. 252

The Tuareg are also very fond of "tikamarin" ⵜⵉⴽⴰⵎⴰⵔⵉⵏ , cheeses as hard as wood which they get from Aïr. They grind them in mortars and mix them in their food. 234 252 262 438

They very seldom eat meat, except that of game which they can kill in a hunt: gazelles, mountain sheep, and antelopes. But often they prefer to smoke this game in order to go and sell it in the Tidikelt. 262 224 251 438

262 /106 cont./gazelles and wild sheep is much esteemed, particularly since it costs nothing, but having it depends on chance. The hare is eaten only by children or Negroes. Birds, wild or domesticated, are not much liked.

252 Meat is eaten boiled or grilled, always well done. The Tuareg mechoui /roasted sheep/ is called "abatoul" (hole). A hole is dug in rather coarse-grained sand, and a large fire is built in it. The embers are then removed from the hole, and the dismembered animal, well cut open, is placed in it, without butter or spices. The meat is then covered with sand, and a fire is maintained over it for two or three hours. The meat is then pulled out, is strongly hit with a stick to knock off the grains of sand, and is ready for sampling.

[262] Practically speaking, the Tuareg never eat green vegetables; they keep dried onions (tarafaret), which give [251] some taste to their dishes; dried tomatoes, abundantly produced in the Ahaggar, are also used.

Wheat, rather seldom used, makes it possible to make couscous and flat cakes called "taguella." The Tuareg also make taguella with millet flour, but these are truly awful.

262 /107/ It is well to note the scruples of the Tuareg so far as Islamic food taboos are concerned.

They continue, in fact, to eat their traditional food, and it happens that their custom fits in with Moslem regulations.

To amuse themselves, children eat "tilout" and those large lizards called "dobs," which they grill on glowing embers. They open the stomach and eat little pinches of the flesh cooked in the skin, somewhat as one would eat a soft-boiled egg.

Chicken eggs are not much liked; children accept them, but they prefer dob eggs.

The daman, called akaokao, a wild little rodent of the granite hills, is eaten only by the Negroes.

European food has not penetrated the tent, so to speak; only patés are liked, but the Tuareg do not yet go so far as to

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

to the killing of a camel for wedding guests. Otherwise the Northern Tuareg like those of Ayr only kill sick animals for food.

There are certain practical reasons why camels should not normally be killed for food among the Tuareg. Even very old camels fetch high prices at markets of the northern oases (Tamanṛaset, Tidikelt), and the Tuareg prefer to get the money instead of eating their old camels. This is easily understood when we consider the fact that one camel contains so much meat that it cannot be eaten quickly by the members of a household, and camel's meat is rather tough and must be boiled for several hours to be eatable. Besides, camel's meat is not very well suited to be preserved for eating at a later date on journeys. However, it can be dried and when sick camels are killed part of their meat is often prepared in this way.

A camel is killed in a very particular way quite different from the method of slaughtering other domestic animals and game. It is killed as follows:— Cords are attached very firmly around the legs of the animal which is kept to the ground by several men who sit on its back and draw its head backwards. The artery is thereupon opened at the lower part of the neck close to the chest, and the knife is thrust into the animal at this place, but not so deeply as to touch the heart or the entrails. This stab is quite sufficient to kill the camel, but some people also cut its throat close to the head in the way other domestic animals are killed. Very peculiar also is the way camels are skinned. While other animals are skinned in such a way that the hide can be removed as entire as possible (cf. Fig. 173), the carcass of a camel is cut up before skinning. The four legs with their thighs are cut loose close to the carcass, which is thereupon cut into several parts by means of a large chopping-knife or an axe (cf. Fig. 44). The hide is thus removed from the carcass after partitioning; but it is difficult to remove the hide as it sticks firmly to the meat, and only part of it is taken off for later use. In Ayr the Tuareg do not

Fig. 44. Skinning and partitioning of a young camel. Ayr, *Irawilen*.

[text continues on p. 67]

Hunting

For the pastoral Tuareg hunting is not an important occupation, and nowadays it is practised mainly by those few Tuareg who possess rifles or guns. Traditional hunting methods are thus of far less consequence than in the past, but some of them are very interesting and most significant for a historical analysis of Tuareg culture.

AHAGGAR

Northern Tuareg areas are not very rich in game. In Ahaggar the main types of game are the gazelle (*ahenkof*, fem. *tahenkof*; *Gazella dorcas* sp.) and the barbary sheep (*udad; Ammotragus lervia*). The big gazelle (*énir; Gazella dama permista*) and the addax antelope (*amellul; Addax nasomaculatus*) are very rare; they are occasionally seen in the plains outside of the mountains. The ostrich (*aubél*; *Struthio camelus*) was very common in the past, but is now exterminated.

The small gazelle is rare and shy within the Ahaggar Massif, while fairly abundant and comparatively easy to hunt with a rifle in the northernmost massifs and their surrounding plains. Of seven camps visited in Ahnet 1954, gazelle hunting was engaged in by the members of two households, and I estimate that they killed one or two gazelles every week. In most camps of the Northern Tuareg there are no true gazelle hunters, and when a rare gazelle is killed its meat is easily eaten in one day by the members of a single household – in addition to three or four pounds of wheat-bread or millet-porridge. Gazelle skin is of little practical value to Tuareg craft. It is not generally used for the manufacture of important domestic articles such as water bags and containers for milk and butter, but it is suitable and much esteemed for certain types of decorated leather work and for fine leather cords, e.g., necklaces for amulet cases, reins for riding camels.

Barbary sheep are extremely shy, and they live mainly in inaccessible mountains. They are still fairly common in certain isolated parts of the mountains, but they were more numerous in the past when hunting was practised without rifles.

The Tuareg estimate that the amount of meat obtained from two gazelles corresponds to the meat of one grown goat, while a big barbary sheep provides as much meat as that of four goats. Meat of barbary sheep is better suited for drying than meat of other game animals, and the thick hide of these animals is valuable for the manufacture of tents and for large bags used for the conservation on journeys of dates, grain, flour, and the like. The horns of barbary sheep are used as butter containers (Fig. 165), and some Tuareg add the powder of crushed horns to butter before heating it (cf. p. 222). Barbary sheep are of greater economic value to the Ahaggar Tuareg than other types of game, and

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

412
222
262
415
251

Fig. 123. Digging stick (*ɗaweɣ*) which serves to dig up wild edible roots and other purposes. Ahaggar, the *Dag Ɣali* tribe. Dimension: 0.883 m (total length). (N.M. G. 5252).

Fig. 124. The wild plant *ihahelewen* (sing. *ahahel*) (*Cistanche Phelypaea*) which yields edible roots esteemed for food (bread). Tasilé-n-Ajjer.

Fig. 125. Skin bag of the *tchchékwat* type made from the skin of a kid and containing *adaseam* berries (*Osyris alba*). The berries are normally eaten fresh, but are also conserved in skin bags to be eaten later after soaking in water. Ahaggar, the *Dag Ɣali* tribe. Dimension of the skin bag: 0.33 m. (N.M. G. 5244).

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

243

Fig. 137. The fresh soil carried to old gardens is placed in small heaps to be spread out between the tender plants of wheat and barley. Ahaggar, Abalessa.

241 *andrum sativum*, *Cuminum Cyminum* (*azkar*), *Daucus Carota* (*ezzeruğet*), *Cucumis melo*, *Lagenaria vulgaris* (cf. Maire 1933, and particularly Maire 1940, p. 401).

248 [262] In addition to the above-mentioned plants there are various types of fruit trees which do not play any considerable rôle for food. The gardens contain very few date palm trees (*tazzayt*, *Phoenix dactylifera*) and there are no palm trees of any value in the gardens situated in the upper mountain zones where the fig tree (*tahart*, *Ficus carica*) thrives much better than in the lower country; the figs are consumed fresh, or they are put on strings for drying, common practise elsewhere in North Africa. The [251] [386] pomegranate (*ierrummant*, *Punica Granatum*) is grown in some gardens; its fruits are eaten, and they are also used for dyeing skins (cf. p. 282). Grapes (*tezzebibt*, *Vitis vinifera*) are also grown in some gardens.

Maire mentions the cultivation of the peach (*Prunus Persica*) and the apricot (*Prunus Armeniaca*) (cf. Maire 1940, p. 401). These fruit trees have undoubtedly been quite recently introduced for Foucauld states that they are not grown in Ahaggar (cf. Foucauld 1951–52, I, p. 79 f.).

243 423 There are nowadays many agriculturists who have their private gardens so that they cultivate their winter crops and their summer crops entirely for their own use. But most agriculturists grow winter crops of wheat and barley on behalf of the Tuareg who are then the true garden owners.

[312] [476] Agriculturists who cultivate their gardens on their own behalf frequently irrigate crops by means of draught animals (zebus) which raise water from wells, but there are also some farmers who cultivate independently without any contract with pastoral Tuareg and nevertheless belong to a *foggara* team.

243 It can be estimated that an independently working agriculturist obtains a total yield of about 700 kilos of wheat and barley grown in winter. Of this yield he gives 10 kilos to the *Amenukal*, or to the

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

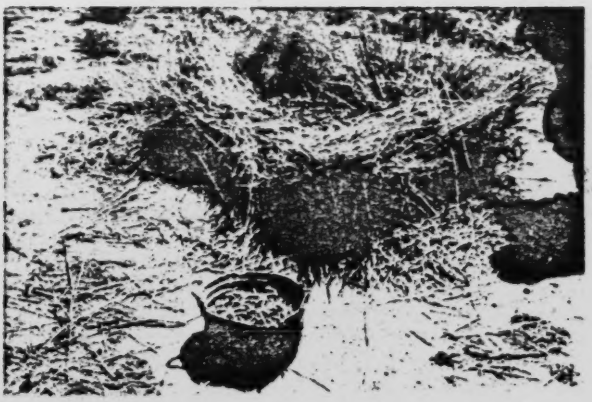


Fig. 142. Tomatoes (*tomatem*; *Solanum lycopersicum* and a type of melon (*tazenut*; *Cucurbita* sp.) cut into slices and left upon a layer of straw for drying. A basket (*tésenit*) filled with ears of millet (*énélé*) is seen in the front. Ahaggar, *Ahl Azzi* Arabs.

from Constantinople, and the true *Imeggedezen*, it is said, came from the same region. They were kinsmen of the Sultan who came to see their relative Sultan as guests or visitors and therefore acquired the name "*Imeggedezen*". They founded the city of Agadez, though it is said that sedentary people of the *Itésen* group of Tuareg were already living at this place. The city of Agadez seems to have been founded in the 15th century shortly after the foundation of the Sultanry which was established 1405 A.D. (cf. p. 414 f.). I shall return to the problems connected with the establishment of Agadez in a later chapter, and shall here content myself by saying that Agadez was established as a trading post, which also became the seat of government of Ayr, and the town never seems to have been a true agricultural settlement. There are no gardens, and even drinking water is very scarce and fetched by the women from outside of the city at wells and in river beds. The *Imeggedezen* are mainly city dwellers though there is a small population of agricultural *Imeggedezen* that possesses gardens at Alarses, a few kilometres north-east of Agadez.

In Barth's days the main language of the sedentary Agadez population was *Sonray* (Barth 1857, I, p. 504). This is still spoken by a few people within the city, and it constitutes the traditional language of the people inhabiting the oasis of Ingal (1.430) west of Agadez. These Sonray-speaking people of Ingal, known to the Tuareg as *Isawenen*, subsist mainly upon their palms which yield dates of an excellent quality, and they do not otherwise engage much in agricultural activity. In the winter season some of these people settle in Tegidda-n-tésemt towards the north to work in the salt pits. Trade and crafts are also important industries to the sedentary people of Ingal, which owns a market.

Throughout the Ayr Massif there are many agricultural villages in which the farmers live in straw-huts, and in houses built of stone and mud (cf. p. 327 ff., Figs. 246 ff.). Most people of these villages belong to the group of *Kel Ewey* Tuareg, but there are also some agriculturists who belong to other Tuareg groups, e.g., the *Itésen* (cf. p. 330, 412, 414, 417 f.). The *Kel Ewey* Tuareg originally came from the north as true fair-skinned Tuareg, but in Ayr they mixed with an ancient negroid and Hausa-speaking population that subsisted on agriculture.

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

243
415

Fig. 144. *Kel Ewey* woman winnowing grain by shaking it in a plaited bowl. Ayr. Iferwan.

243 large mortar. Winnowing of cereals is performed by shaking the seeds in a plaited bowl or tray to let [415] husks and other impurities be removed by the wind (Fig. 144).

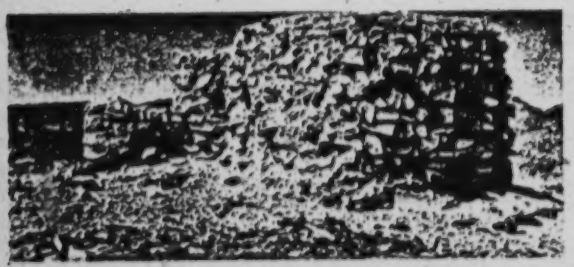
251 343 The Northern Tuareg use the following means for storing of crops:— (1) *taddăt*, that is a skin bag containing grain, dates, and the like, hidden under stones and rocks in the mountains; (2) *ẽgend*, or *anu*, an underground storeroom lined with mats. It is used for cereals, including wild seeds, and is found both among agriculturists and pastoralists (Fig. 146); (3) *tarassana*, a grain silo built from stones and mud (Fig. 145). Nowadays such storerooms are not only used by agriculturists but also by pastoralists. However, this type of storeroom is said to have been introduced to Ahaggar with the introduction of irrigation agriculture about a hundred years ago, and was originally unknown to pastoral Tuareg.

[136] Among the *Kel Ferwan* Tuareg all storerooms for cereals are known as *tédengewt*. The storing of vegetable food products in skin bags covered with stones or hidden under rocks is apparently unknown – perhaps because of the numerous small rodents and the rich insect life which includes numerous white ants. Underground storerooms like those of Ahaggar are used by agriculturists and pastoral Tuareg alike. They are frequently excavated so deeply that they can hide a grown man standing in

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

them. They are lined and covered with mats as in Ahaggar, and though they may be used for the storage of wild seeds they are mainly used for grown cereals and are generally found in or close to gardens. Grain silos built of stones and mud – the *tarassana* type of Ahaggar – are said to occur among the *Kel Ewey* but I have never seen such storerooms in their villages, nor have I met the typical African storeroom built of straw and resting upon poles until south of the Massif in Damergu where they are used by shifting cultivators. Large earthenware containers shaped like cooking pots are used to store vegetable products (cereals) in certain villages, particularly at Iferwan. Pastoral Tuareg of Ayr have the underground storerooms for the preservation of surplus grain and other vegetable products. Cereals to be consumed in the camps (notably millet) are kept in large skin-bags resting upon poles that they may not be damaged by white ants. The Ahaggar Tuareg also preserve cereals in their tents in skin-bags.

Irrigation agriculture is a strenuous task, but it is less influenced by climatic conditions than all other occupations practised in the Sahara. The farmers are not exposed to the same disasters of drought periods as are pastoral Tuareg in the north, though it is said that rain is a direct blessing also to irrigated crops. But cultivated plants are exposed to certain dangers, e.g., locusts, and crops do not always thrive as they should. Bad luck in agricultural activities may in the opinion of the farmers be due to some mystical power or other. It may arise from incorrect treatment of cereals and dates so that they lose their *elbaraka*. Menstruating women, as mentioned above, are dangerous to vegetable food, and this is also true of the fire, for which reason one should never throw date kernels into the flames. The farmers also fear that their crops may suffer damage from the attack of the *Kel Asuf* spirits, and particularly from the attack of the malignant force attached to the "evil eye" or the "evil mouth". To protect their crops the farmers frequently use amulets such as broken pots and skulls of domestic animals (notably of donkeys), which are considered an effective means against the "evil eye" and the "evil mouth" (cf. Nicolaisen 1961, p. 133 f., 160).



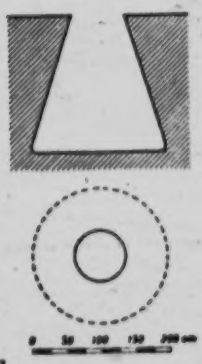


Fig. 145. Grain silos of the *tarassana* type built of stones and mud. Ahaggar, Abalessa.
Fig. 146. Cross section of a subterranean storeroom for cereals, and the like (*égoad*). Dimensions according to Foucauld: 2.00 m–2.50 m deep, 2.00 m in diameter at the bottom, 0.75 m in diameter at the surface (cf. Foucauld 1951–52, I, p. 459 f.).

[text continues on p. 209]

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

417
251

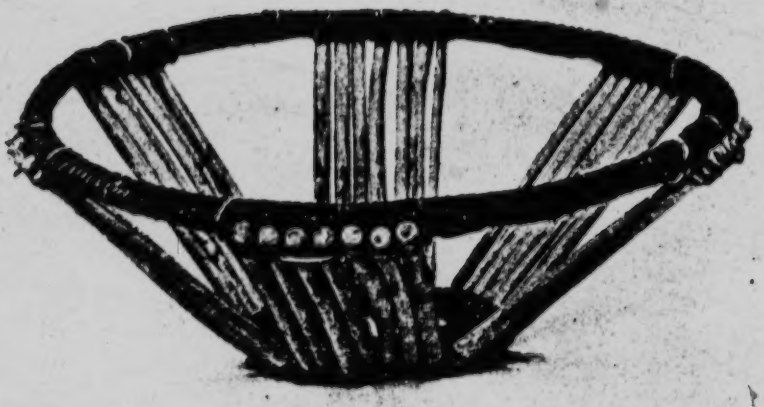


Fig. 132. Circular wooden frame to support milk-bowls and other food-containing vessels. The frame is attached to the roof of the mat tent or rests upon sticks (cf. Fig. 291). This is done in order that food and food-vessels shall not be damaged by the numerous ants. Ayr, the *Imezzureg* tribe. Dimension: 0.44 m in diameter. (N.M. G. 6463).

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

Food Preparation

It is natural to open this chapter on food preparation with a description of the use of milk (*akh*) among pastoral Tuareg. The milk which serves as nourishment for the Tuareg derives from goats, sheep, cows, and camels. Milk of all these animals is frequently drunk fresh without any preparation, and this is generally the case with camel's milk, which is not fitted for churning butter or for the manufacture of cheese (cf. p. 63). Milk of goats, sheep, and cows is used for butter and cheese, and is added to various dishes to be described below.

Fresh milk, which is known to the Ahaggar Tuareg as *akh kefayen*, is sometimes heated by means of hot stones (*idayen* in Ahaggar; no particular name in Ayr). The stones heated are then put directly into the wooden milking bowl. The Tuareg practise this method mainly in winter as they do not like to drink cold milk, but milk is heated all the year round in this way with milk of animals which have just brought forth kids, lambs, or calves including camel calves. The milk taken from a mother animal until about twenty four hours after the birth of kids, lambs, or calves is known to the Tuareg of Ahaggar and Ayr as *édeṛes*. It is very rich and when it is heated by means of hot stones it becomes very thick forming almost a kind of cheese which is highly esteemed by the nomads. The milk of sheep and goats is considered *édeṛes* for two days after the birth of kids and lambs, though this term should properly be applied only to milk taken the first day after birth. The main reason for using hot stones for milk heating is said to be that milk does not get dirty in this way as it does if heated in earthenware pots over the fire (cf. p. 126).

Sour milk (*selay* in Ayr) is consumed mainly by the Ayr Tuareg, who conserve it in skin bags and especially in calabashes, for which reason this sour milk is also known to the Ayr Tuareg as *akh n ezenu*, that is "calabash milk". The milk is often left about twenty four hours for souring, and it is then placed in a very cool place in order that it may not turn into junket which is not eaten by the Tuareg.

Both in Ayr and in Ahaggar the Tuareg may add water to fresh milk (cf. p. 126), and the Northern Tuareg also add water to buttermilk (*akh n aǧiwir*). This mixture of water and butter-milk is in high esteem among the Northern Tuareg, and camel riders frequently carry it with them in a special skin-bag, known as *tasufra* (Fig. 155), attached to the riding saddle. Butter-milk cannot be transported in this way if water is not added, for the milk, though already once churned, will become butter during the camel's march. The Ayr Tuareg do not drink butter-milk which is given to domestic animals, but this beverage is so appreciated by the Northern Tuareg that some of them will not drink fresh milk unless butter-milk has been added, a mixture known as *ageregefa*, *akh imayen*, or *amsey*.

[p. 221]

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

*4/15 [322] [531] [285]

Fig. 153 a–b. Tuareg funnels (*ɨssegefi*, pl. *issegefa*) which are used for milk, butter, and for other liquids.
a. Wooden funnel ornamented by burning. Made by blacksmiths. Ahaggar, the *Dag Ilali* tribe. Dimension: 0.210 m high. (F.M. 240).
b. Funnel plaited from straw of *taleggit* (*Juncus maritimus*) with the rim reinforced with leather. Made by Tuareg woman. Ahaggar, the *Dag Ilali* tribe. Dimension: 0.135 m high. (F.M. 243).

234 *4/15 In Ahaggar the method of churning butter is as follows:— Milk of the morning yield is put into a skin bag (*ɨmesesley*) (Figs. 156–157) to remain in this bag until next morning when churning takes place. During the hot season the *ɨmesesley*, filled with milk, is placed in the shade of the tent in daytime, while in winter it is placed in sunshine, or close to the fire. Some milk of the evening yield is sometimes added to the morning milk in the *ɨmesesley*. Before churning the milk thus soured is poured into the proper churning bag (*aɣiwir, tanwart*) which is inflated and shaken. Churning bags may vary in size; when there is little milk to be churned a little bag is used and shaking is done holding it in the hands (Fig. 158). When milk is very plentiful, butter is sometimes churned in larger bags (*awwar*), which at one end is attached to a pole, while shaking is done by pulling the other end of the bag with one or both hands. When the milk is shaken in this way it forms small white balls of butter which are removed from the churning bag with a wooden spoon (Fig. 191) when water has been added. This white butter (*udi wa mellen*, or *tesemdat*) is occasionally used for food without further preparation, but this is not normal, for newly-churned butter is generally put into an earthen pot (*tɨrirt*, or *afrun*) (Figs. 186, 187 a–b) together with parts of an annual plant known as *aynemis* (*Chlamydophora pubescens*) (Fig. 160) to be heated over the fire. Some Tuareg also add meal of dried dates, or of horns of barbary sheep. After heating, butter (*udi*) assumes a dark yellow colour. It is stored in containers made of camel's hide (*tahattint, asaɣen, ayaššu*) (Figs. 161–162), or in Sudanese calabashes (*arenu*) (Figs. 163 a–b). A particular metal pail (*ɨrir*) (Fig. 164) manufactured by native blacksmiths is also used for butter in Ahaggar,

[412] [262] [824] 251 *4/15 [824]

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

butter in Ahaggar, and butter reserved for greasing the hair is frequently kept in a large horn (*isek*) of barbary sheep (Fig. 165).

The Ayr Tuareg make butter (*wijl*) in much the same way as the Northern Tuareg. For churning they use a skin bag (*anwar*), or a calabash (*azenu*), and they say that they prefer skin bags in winter, and calabashes in the hot season. Butter is heated or boiled immediately after churning, but the Ayr Tuareg do not add parts of plants, date flour, or the like. In Ayr butter is not churned as regularly as in the north. It is used mainly for cooking meat of thin animals, for a sauce which may be used for millet porridge instead of milk (cf. p. 243 f.), and for greasing the hair. Among the Northern Tuareg butter is added to many different dishes and particularly to bread, which is eaten almost daily by many people. In years of drought the Ahaggar Tuareg get their butter from Ayr (cf. p. 212, 215), and the Ayr Tuareg make much butter for export in such circumstances. They churn most butter from cow's

Fig. 134a–c.

a. Wooden funnel. Made by blacksmiths. Ahaggar, the *Dag Ilali* tribe. Dimension: 0.146 m high. (N.M. G. 5203).
b. Funnel consisting of a piece of calabash which derives from the south. Ahaggar, the *Dag Ilali* tribe. Dimension: 0.131 m high. (N.M. G. 5202).
c. Wooden funnel with a strap of cord of goat's hair. Made by blacksmiths. Ahaggar, Olufsen's collection. Dimension: 0.175 m high. (N.M. G. 1.150).

All wooden funnels are cut from wood of the *tabarakkat* tamarisk (*Tamarix aphylla*).

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

*4/5
237
●251

Fig. 155. Skin bag (*tasafra*) for the conservation of butter-milk on journeys. The bag is made from an entire goat-skin and has a handle of goat-hair cord tied to the skin patches of the hind legs. A leather handle is attached to the lower part of the bag which is ornamented with leather fringes. Ahaggar, the *Afuh-en-ahki* tribe. Dimension: 0.77 m long without the fringes. (F.M. 89).

They churn most butter from cows

234 milk, and this butter is not considered as delicious by the Ahaggar Tuareg as their own butter, churned
[262] mainly from goat's milk. – The use of wooden churning sticks by means of which milk is stirred in
234 an open container is unknown in Ahaggar and Ayr, so far as I know. Churning sticks are used in
412 other Tuareg groups. They are common among the Tuareg of Adrar-n-Foras (Musée d'Ethnographie, Neuchâtel, no. 49.2.44 & Musée de l'homme, Paris, no. 38.16.48) and among the *Iwillemmeden*
184 Tuareg and the Fulani (Musée de l'homme, Paris, nos. 41.19.411 & 41.19.1326).
171

234 All Northern Tuareg, as well as the Northern Arab pastoralists and semi-nomadic Berbers and
[177] Arabs of the Atlas, make cheese from butter-milk, while this type of cheese is unknown among the
[184] Southern Tuareg and also among the Fulani. In Ahaggar butter-milk cheese (*awles*) is manufactured
[462] by women in the following manner:— Butter-milk is heated over the fire in an earthen pot (*tdyirt*, or *ufrun*)
* [415] (Figs. 186, 187a–b) by which process the milk is divided into two parts, namely pure water and a curdled mass of milk (*akru*). This mass of curdled milk is placed in a special basket (*arugus*) (Figs. 167a–b) hanging from a tree or a similar object to sort out the whey. Thus there remains a mass of cheese in the basket, and this mass is formed into small round pieces to be left for drying. Butter-milk cheese is manufactured in this way by all Northern Tuareg who are thus able to obtain butter and cheese from the same milk.

234 Another type of cheese is made from fresh milk and is manufactured not only by the Northern
171 [i.e. the Ayr Tuareg -- Ana/yrt]

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

Tuareg but also by the southern groups and by Arab pastoralists of the Sahara; it is also known in the Atlas, and is on the whole widely distributed in Northern Africa. This type of cheese is known to the Northern Tuareg as *takammart* and it is manufactured as follows:— Fresh milk is heated and then poured into a large wooden bowl (e.g., *tarehat*) (Figs. 195a–b). The milk is curdled into a mass of cheese by means of a rennet (*akammar*) consisting of the abomasum of kids that have never tasted anything but milk. The curdled mass of cheese is pressed with the hands and with a piece of straw-mat (*éseber*) in order that the liquids may separate. The mass of cheese is formed into small rectangular pieces of cheese which are left on the little straw-mat for about one day. They are then removed to be dried finally on a platform (*tahaga*, *tafalkat*) made of branches.

Cheese made from fresh milk is known to the Ayr Tuareg as *tekemmart*; it is manufactured to very great extent and much in the same fashion as just described from Ahaggar. The abomasum of little kids or lambs to be used for rennet is named *tedeyast*, and the Ayr Tuareg add parts of an annual plant known as *ekochmaren* (*Caralluma Mouretii*) in order that the milk may curdle quickly. The Ayr Tuareg also use little mats plaited from stems of the *afezu* grass (*Panicum turgidum*) to press and form the rectangular pieces of cheese; the Ayr Tuareg make mats (*tésebert*) (Fig. 168) particularly for this purpose, while the Ahaggar Tuareg generally use an old piece of a tent mat (*éseber*). In Ayr the rectangular pieces of cheese are dried on bunches of hay placed in trees (acacias), or on the top of the mat-covered tents.

The *takammart* or *tekemmart* type of cheese made from fresh milk is in high esteem as food among all pastoralists of the Sahara. It is generally eaten when newly-made and soft, though it may also be stored. The Ahaggar Tuareg make this type of cheese only when milk is plentiful, while the Ayr Tuareg manufacture it most of the year though the main season of cheese-making is the season of *akasa*.

Fig. 156. Skin bag of the *tmesesky* type used to sour milk before churning. Ahaggar, the *Ajjer-en-tehli* tribe. Dimension: 0.37 m high. (F.M. 170).

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

*415
237
283
251

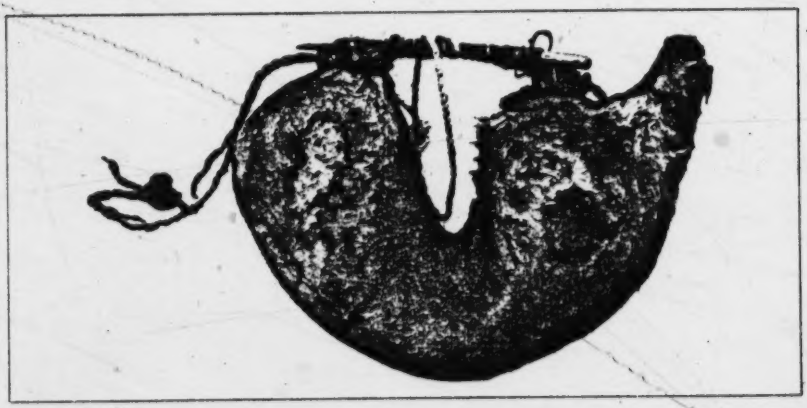


Fig. 162. Very large butter container (*ayatka*) made from the neck-hide of a camel. It is provided with a wooden handle wound with hide and with cords made from goat's hair and bast of *abaŋ* (*Acacia Raddiana*). Similar containers are also used for the conservation of cereals. Ahaggar, the *Dag Ɣali* tribe. Dimension: 0.62 m long. (N.M. G. 5201).

Fig. 163a–b. Calabashes used for storing butter in Ahaggar but introduced from the south (Ayr).

a. Calabash (*azena*) with a wooden stopper fastened to a leather strap and provided with a handle of cord made of goat's hair. The wooden stopper is called *azkay*. Ahaggar, the *Ajjah-en-tehli* tribe. Dimension: 0.620 m high. (N.M. G. 5206).

[484] b. Calabash (*azenat*) with a handle of white goat's hair. Used for transportation of butter on journeys. Ahaggar, the *Dag Ɣali* tribe. Dimension: 0.175 m high. (F.M. 253).

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

Fig. 164. Pail (*érir*) made from tinned brass by blacksmiths. It is used for storing butter to be used for food preparation in the tent. Pails of this type form part of the dowry in the *Dag Rali* tribe. Ahaggar, *Ahl Azzi* Arabs of Tamaṛasset. Dimension: 0.155 m high, 0.230–0.235 m in diameter at the rim. (N.M. G. 5820).

Whenever the Tuareg kill an animal for food they perform a sacrifice, the idea of which seems to be an identification of the man and the killed animal. This idea appears most clearly at the sacrifice made on the occasion of the name-giving feast seven days after the birth of a child. A marabut, that is a Tuareg of the *Ineslemen* class, and the father of the child stand close together with their faces towards Mecca while the animal to be sacrified is kept to the ground. The marabut cuts the animal's throat and doing so cries out the name to be given to the child, and this name is thereupon repeated by the child's father. When the killing is performed in this way the knife (*elmust* in Ahaggar; *ézegiz* in Ayr) and the cut across the throat are washed with water before skinning is undertaken. I have dealt with certain ideas of Tuareg sacrifice elsewhere, and have stated that on certain occasions they may sacrifice not to God but to the *Kel Asuf* spirits (Nicolaisen 1961, p. 122 f., 147 f.). But whatever may be the ideas attached to Tuareg sacrifices all animals, with the exception of the camel (cf. above p. 65), are killed by cutting their throat.

The methods of meat preparation are almost identical in Ayr and Ahaggar. The most common method everywhere is cooking in an earthen pot, known in Ahaggar as *ufrun*, *téṛirt*, *alekkin*, or *talekkint* according to its size and form, or in a metal pot (*érir*) of European origin. Such European pots are common everywhere in Tuareg camps, but earthen pots are still used though less durable, for earthen pots are cheap. Pots made of metal or copper, which are also known as *érir*, were also found among

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

up with small strips of fat. The pieces of liver covered with fat are put on a slender iron or wooden rod to be roasted slightly over the fire. This dish is known to all Tuareg by the Arabic word *chnefsif*. It was introduced among the Northern Tuareg by the Arabs, but is not widely known among the Ayr Tuareg.

This brief description of Tuareg meat preparation can adequately be supplemented by a reference to two peculiar dishes:— (1) A dish known to the Ahaggar Tuareg as *talebeggat*. It consists of meat which after boiling or roasting is pounded in a large mortar and frequently served with liquid butter. This dish is also known to the Ayr Tuareg. (2) A dish which is described from Ahaggar by Foucauld under the name *ebangor*. It consists of untanned skin which is eaten in case of hunger after the following preparation:— Untanned skin from household implements, shields, and the like is roasted under the ashes, and is thereupon pounded into small pieces. These are eaten without any further preparation, or after boiling. (Foucauld 1951–52, I, p. 73).

Like other North African peoples the Tuareg dry meat of domestic animals and of game. The people of Ayr know three distinct drying methods, namely (1) *iwesan*, that is meat which is boiled until it is free of blood; it is dried in the shade; (2) *tikelsin*, uncooked meat cut into pieces to be dried on a string in the shade; (3) *kules*, uncooked meat cut into strips which are dried for some time to be treated with salt and various spices. This last method is not practised among the Tuareg of Ayr, but by sedentary people of Agadez and by Negroes further south in Damergu. The Ahaggar Tuareg generally boil or roast the meat before drying; meat roasted in the ashes according to the *abenul* method and thereupon dried is known as *takasa*. I do not know whether the Ahaggar Tuareg also practise the method of drying raw meat like the Ayr Tuareg, but the dried *agezzeram* lizzards which they take to Tidikelt on trading expeditions, are dried uncooked. Furthermore, the method of drying raw meat is known elsewhere in the Northern Sahara, and I have myself seen it practised among the Berber-speaking *Chawîya* of Aurès.

I conclude the description of Tuareg meat preparation with a brief note on the use of blood of living

Fig. 166. Wooden double-vessel (*azar*) to contain water and butter for greasing the hair. Similar containers with a third vessel for fine-grained sand are also found among the Tuareg. Made by blacksmith from wood of the *tabarak* tree (*Balanites aegyptiaca*). Geometrical ornaments are produced by burning with a hot iron. Ahaggar, *Ahl Azzi* Arabs at Tamaqaset. Dimension: 0.241 m long. (N.M. G. 5880).

[text continues on p. 235]

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

among them it is eaten in particular by women during the first seven days after the birth of a child, that is during the period from birth to the name-giving ceremony known as *isnawen*. It is considered dangerous for a woman to eat too much vegetable food during this period, while meat is believed to make her recover quickly after birth. The same diet is followed by young boys after their circumcision until their wounds have healed. These dietetic rules no doubt have their root in magical beliefs.

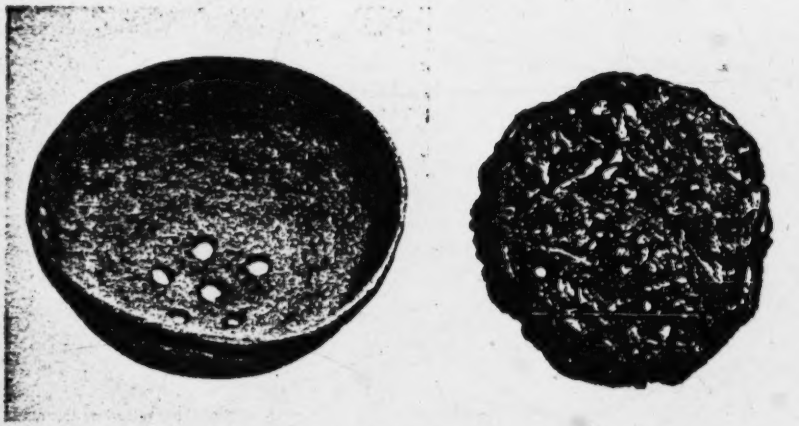
All Tuareg esteem liquid or semi-liquid dishes which are consumed mainly during the very hot season. A very common dish of this type is that named *aṛejira* (Ayr) or *aṛehara* (Ahaggar). It is made from flour of millet, sorghum, dates, and crushed cheese mixed with water, the main substance being pounded millet. The dish is served in a large wooden bowl or in a calabash, and is eaten and drunk by means of a large wooden ladle called *tamulat* (Fig. 194a–b). This liquid dish is a substitute for milk during the hot season when milk is scarce, and it is frequently used for food on journeys, in which case it is transported in the form of dough-like balls to be dissolved in water just before eating.

The terms *aṛejira* and *aṛehara* are used for various liquid or semi-liquid dishes, or beverages, for which the Tuareg have particular names according to their composition. Dates are less important for liquid dishes in Ayr than among the Northern Tuareg to whom dates form an important part of food. Very important in the north is a dish known as *talekessat*; it is made from dried dates pounded

Fig. 182. Tuareg women turning a hand-mill (*tazirt*). In the foreground a woman shaking flour into a wooden bowl. Note the ornamented patches of leather hanging down from the tent sheet. Ahaggar, the *Dag Rali* tribe.

[Text continues on p. 247]

7:Nicolaisen E-5 (1951-1962) 1963 MS25 Tuareg MS25

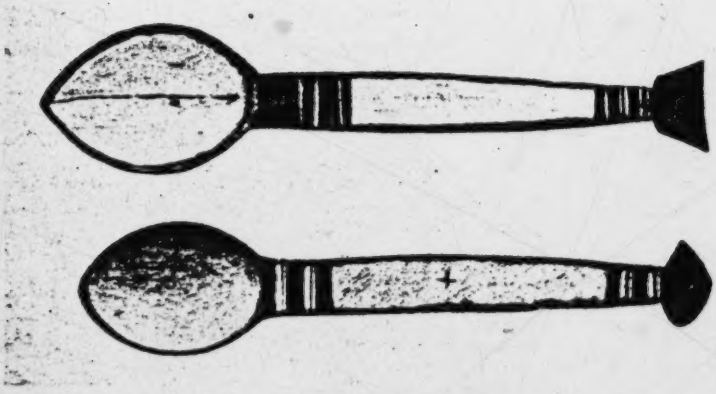


252
415*
←

251 ●
252
432
→

Fig. 189. Earthen jar (*denfu*, or *denbe*) of the particular type used for the preparation of *keskesu*. Ahaggar, *Hurrutin* of Tamanṛaset. Dimension: 0.16 m high, 0.30 m in diameter. (F.M. 215).

Fig. 190. A kind of cake (*surfet*) made of onions and dates which are mixed and pressed. Such cakes are made in Tidikelt but are sold at Tamanṛaset by Arab merchants. They are pounded in the mortar or are crushed between two stones before cooking. Dimension: 0.10 m. (N.M. G. 5847a).



412
824
531
564

Fig. 191. Wooden spoons (*tesukalt*, pl. *tisukalin*) cut by blacksmiths from wood of the *taburak* tree (*Balanites aegyptiaca*). Ahaggar, the *Aṛah-en-tehht* and the *Dag Ṛali* tribes. Dimension: ca. 0.26–0.28 m. (F.M.).